

NEW WESTERN SPIDERS

By RALPH V. CHAMBERLIN.

Most of the new forms of spiders described below were found in collections made by the writer in Utah in the latter part of August and the early part of September, 1917. The collections were made on Chalk Creek in the Uintah Mts., at elevations of from 7,300 to 10,000 ft. and at and near Fillmore, Millard Co. In addition to the spiders from Utah, a number of new forms from other localities noted while identifying the collections mentioned are here described.

DICTYNIDÆ.

Amaurobius utahensis sp. nov.

Male—Carapace, sternum, labium, endites and legs yellow, without any reddish tinge, the legs unmarked. Abdomen blackish, the anterior middle region of dorsum obscure yellow, the posterior half with dark marks which are, excepting the first ones, only vaguely separated from each other. Anterior row of eyes procurved; medians close together, but more than their diameter from the laterals. Posterior eyes much smaller than the anterior ones, the medians slightly smaller than the laterals, about twice their diameter apart and about twice as far from the laterals. Area of median eyes rectangular, being as wide behind as in front, longer than wide. Distal joints of palpus heavier than in *nevadensis*. Tibial apophyses very similar to those of the species mentioned; but the exterior one distally less uncate, the median one basally broader and more narrowed distad, and the mesal one obviously broader and shorter and differing particularly in being united with or carried forward on a common base with the median one much farther, the ridge uniting the two in *nevadensis* being slight or obsolete.

Length, 11.5 mm. Length of cephalothorax, 6.1 mm. Length of tib. + pat. I, 6.4 mm.; of tib. + pat. IV, 6.7 mm.

Type—M. C. Z. 414, Utah: Fillmore.

This species is nearest *A. nevadensis* Simon. It is a more robust species, wholly lacking the reddish cast characteristic of *nevadensis*. It differs chiefly otherwise in the details of the male palpus as indicated above and also presents minor differences in the eyes.

Amaurobius nomeus sp. nov.

Female—Carapace and sternum light yellowish brown, becoming blackish in anterior portion of pars cephalica. Legs paler. Labium and endites chestnut, pale across tips. Chelicerae black. Abdomen above greyish yellow, with a narrow, median longitudinal dark mark extending well caudad of the middle, where its point ends at the angle of a transverse chevron line, which is followed by several others; in front of the first chevron there are two or more lines running obliquely caudoectad from the edge of the median mark. Sides of abdomen darkened by numerous spots and streaks as is also the venter on which they tend to form two longitudinal stripes and a narrower median line separated by clear spaces. Anterior row of eyes procurved; median eyes smaller than the laterals, their radius or a little more apart, and a little more than their diameter from the laterals. Posterior row of eyes longer than the anterior; eyes smaller than the anteriors; the medians smaller than the laterals. Median eyes forming a trapezium wider behind than in front in ratio of about 25:20 and wider behind than long, the length scarcely exceeding the anterior width. Tibia I armed beneath with two pairs of spines, none being present at distal end; tibia with a single spine at distal end in addition to the two pairs. Epigynum smooth, median interval narrow, the process ventrally rounded. See Plate XIV, Fig. 1.

Male palpus is shown in Plate XIV, Fig. 2.

Length 11.2 mm. Length of cephalothorax, 5 mm. Length of tib. + pat. I, 4.1 mm.; of tib. + pat. IV, 4.3 mm.

Type—M. C. Z. 416.

Utah: Uintah Mts., 10,000 ft.

This species has resemblance to *A. benneti* B and *A. pictus* S. When placed alongside of these species the cephalothorax is seen to be obviously more narrowed at the anterior end. It is distinct in the details of epigynum and eye arrangement.

Dictyna uintana sp. nov.

Female—Carapace fuscous or nearly black, clothed with white hairs. Sternum blackish. Legs yellow, distinctly annulate with black, the annuli of tibia and metatarsus deepest, the femora with a submedian and a distal annulus, patella with annulus at distal end, tibia with an annulus at each end and metatarsus with an annulus at distal end and a broader, but less distinct proximal one. Abdomen testaceous; at base above with a long triangular to hour-glass shaped dark brown mark followed by a number of chevron marks, of which the first is connected by its apex with the basal mark; caudal end of dorsum typically covered by a solid black area; sides of abdomen darkened above by streaks and spots of brown; venter commonly showing an often vague longitudinal median dark band. Anterior row of eyes

straight; median eyes decidedly smaller than laterals, scarcely their diameter from the laterals, one half their diameter from each other and about the same distance, or slightly farther, from the lower edge of clypeus. Posterior row of eyes straight; median eyes obviously larger than the anterior medians, once and a quarter or scarcely more their diameter apart and near the same distance from the laterals; posterior laterals equal to the anterior laterals. Area of median eyes a little wider behind than in front. In front view the inner edges of the chelicerae are obviously curved ectad over most of their length, as shown in Plate XIV, Fig. 3; Epigynum as shown in Plate XIV, Fig. 4.

Male—Chelicerae with a low rounded tubercle or tooth at exterior angle of base. Palpus with tibial apophysis short, but rather stout. Cf. Plate XIV, Fig. 5.

Type—M. C. Z. 405. XIV, Utah: Uintah Mts.; Chalk Creek, elevation, 7,500 ft. Webs on boughs of pine trees.

Resembles *sublata*. The latter, among other differences, has the eyes of the anterior row obviously more nearly equidistant and the form of the epigynum different.

***Dictyna coloradensis* sp. nov.**

Female—This species has to some extent been identified with *D. arundinaceoides* Keys, but is not that species, which seems to be really the *D. sublata* of Hentz. Carapace and sternum fuscous. Legs yellowish or pale brown, without distinct markings or often with femora darkened and tibiae and metatarsi annulate at distal end and with less distinct annuli toward proximal end. Abdomen above with the usual triangular mark at base; behind this two rows of annular markings more or less connected by dark lines or chevrons between them. Anterior row of eyes straight; median eyes a little smaller, separated by about their diameter, very slightly closer to laterals. Clypeus rather low, the height being between once and a half and twice the diameter of an anterior median eye.

Posterior row of eyes straight; eyes equidistant. Area of median eyes wider behind than in front. Epigynum shown in Plate XIV, Fig. 7.

Male—Darker than the female. Femora darkened and a distinct dark annulus at distal end of tibiae and metatarsi and a less distinct one proximally, or legs sometimes lacking these dark markings. Clypeus much higher than in the female and median eyes smaller. Chelicerae dentate at base toward ectal side as shown in Plate XIV, Fig. 6. Process of tibia of palpus stout, of moderate length, distally bi-dentate. Cf. Plate XIV, Fig. 8.

Length of female up to 3.5 mm.

Type—M. C. Z. 395. Colorado: Colorado Springs (R. V. Chamberlin, coll.); Eldora; Pagosa Springs; Fort Collins, etc. New Mexico: Beulah; Mesilla.

Dictyna bellans sp. nov.

Female—Carapace and sternum pale brown to yellow, sometimes of slight reddish cast. Legs yellow. Abdomen grey, under the lens showing the usual network of fine dark lines; a triangular dark spot on base above followed by two or three pairs of large dark dots which may be connected on each side. Venter immaculate grey. Anterior median eyes a little smaller than the laterals. Posterior row of eyes recurved. Area of median eyes as wide in front as behind. Epigynum as shown in Plate XV, Fig. 4.

Male—The abdomen in the types is either wholly immaculate or shows the dorsal markings only vaguely. The basal tibial process of the male palpus is erect, moderately long, and shows but a single distinct tooth or point at distal end. Toward anterior end of tibia above is a second much shorter process or tooth as shown in Plate XV, Fig. 5. Process at base of chelicera long and curved. See Plate XV, Fig. 3.

Length of female up to 2.8 mm.

Type—M. C. Z. 403. Mississippi (R. V. Chamberlin.)

Dictyna sociella sp. nov.

Female—Carapace fuscous, the pars cephalica a little paler. Sternum dusky brown or fuscous. Legs yellow, some darker annuli faintly traceable. Abdomen on basal half of dorsum with two connected triangular dark marks and the usual line of more or less connected dark spots on each side behind, elsewhere the usual fine network of dark lines over a light ground. Anterior eyes nearly equidistant, the median eyes only slightly smaller than the laterals. Posterior eyes also nearly equidistant. Area of median eyes a little wider behind than in front. Epigynum, Plate XV, Fig. 8.

Length, 3.2 mm.

Type—M. C. Z. 412. Washington: Wawawai.

Distinguished particularly by the form of the epigynum and by the eye relations.

Dictyna insolens sp. nov.

Male—Carapace and sternum fuscous. Legs yellow, somewhat dusky, the tibiae and more especially the metatarsi obscurely annulate. The narrow annulus at distal end of metatarsi most distinct. Abdomen dorsally with a black triangular mark at base followed by a pair of dark spots and then two heavy chevrons behind which is a clear area; sides darkened; venter light. Anterior median eyes smaller than the laterals. Posterior eyes equidistant. Area of median eyes a little wider behind than in front. Process of tibia of male palpus very short and proportionately wide with the anterior tooth much the larger. See further Plate XV, Fig. 6. Chelicera with basal tooth slight, rounded.

Length, 2 mm.

Type—M. C. Z. 409. Washington: Olympia.

***Dictyna vincens* sp. nov.**

Female—Carapace and sternum fuscous. Legs yellow to pale brown. Abdomen above at base with a black mark having caudal end excised in an obtuse re-entrant angle and on each side the usual dark lines radiating from its angles and edges; behind the middle first a pair of widely separated dark spots and then typically two exceptionally thick chevrons, which sometimes give the caudal end the appearance of being almost solid black; sides often darkened; venter either uniform or with a dusky or blackish band over its length, or with a black area only in front of spinnerets. Anterior median eyes essentially equaling the laterals, their diameter apart, closer to the laterals. Posterior eyes equidistant. Area of median eyes as wide in front as behind. Epigynum, Plate XV, Fig. 1.

Male—In what is regarded as the male of this species the coloration is similar to that of the female though the general appearance of the abdomen is darker and more uniform with the markings less distinct and sometimes almost obliterated. The palpus is shown in Plate XV, Fig. 2.

Length of female, 3.25 mm.; of male, 2.5 mm.

Type—M. C. Z. 410. Washington: Olympia.

***Dictyna olympiana* sp. nov.**

Male—This small form has the usual general coloration; the carapace and sternum dusky brown; legs yellow; abdomen at base above with a median dark line expanding into a triangular spot in front of middle, this followed behind by the usual pairs of longitudinally connected spots, the sides also dark. Anterior median eyes smaller than the laterals and than the posterior medians. Area of median eyes clearly wider behind than in front. The species is readily characterized by the large size of the tarsus of the palpus and the form of the particularly large palpal organ. The process of tibia is small, erect, and bidentate, the teeth being equal. See further Plate XV, Fig. 7. Chelicera rather small, slightly bulging at base in front, but without a true process or tooth.

Length, 1.7 mm.

Type—M. C. Z. 408. Washington: Olympia.

***Dictynoides* gen. nov.**

Pars cephalica broad, low, not gibbous. Anterior row of eyes straight, the eyes equal or the medians smaller. Lateral eyes on each side subcontiguous. Posterior row of eyes straight, eyes equidistant or the median farther apart than from the laterals. Area of median eyes quadrate or trapeziform, wider than long. Clypeus with height much exceeding the diameter of the anterior eyes. Chelicerae long, with lower margin armed with two or three teeth. Labium broad, moderately narrowed distad, extending a little beyond middle of endites. Endites oblique, inclined. Cribellum entire. Legs without spines.

Genotype—*D. arizonensis* sp. nov.

Includes also *Lathys trivittata* Bks., known from New Mexico. The genus differs from *Lathys* in its inclined endites and much higher clypeus, and from *Dictyna* in its shorter labium and lower, less convex, pars cephalica.

***Dictynoides arizonensis* sp. nov.**

Female—Carapace rufous brown along each side, the median and a marginal stripe on each side paler; along the pars cephalica and converging caudad are three bands of white hair as in *trivittata*. Sternum dusky yellow to nearly black. Legs yellow, not annulate. Abdomen pale with some darker spots above; clothed with white hair. Anterior row of eyes straight; eyes equidistant or the medians a little farther from each other than from the laterals; the medians smaller than the laterals. Height of clypeus more than twice the diameter of the anterior median eyes, slanting conspicuously forward from above below. Posterior row of eyes straight or nearly so, eyes equal in size and obviously larger than the anterior median, nearly equidistant, the medians slightly farther apart than from the laterals. Area of median eyes wider behind than long (cir. 12:10) and obviously wider behind than in front, the anterior width being equal to the length. Epigynum as shown in Plate XVI, Fig. 1.

Length, 5 mm. Length of tib. + pat. I, 2.8 mm.; tib. + pat. IV, 1.8 mm.

Type—M. C. Z. 393. Arizona: Huachuca Mts.; Miller Canyon, elevation 5,600 ft. (W. M. Wheeler, 17th Nov., 1910).

ULOBORIDÆ.

***Uloborus utahensis* sp. nov.**

The types of this species, which are not quite fully mature females, seem readily distinguishable by pronounced differences in coloration in connection with structural features. Carapace and sternum black or nearly so, with the usual clothing of white hair. Leg I with femur and patella entirely black, the tibia black, excepting a narrow ring at proximal end, and the metatarsus with a narrow black annulus at each end and two broader ones in the intervening region, the tarsus dark except at ends. Leg II has the femur black throughout, with no narrow pale median annulus; metatarsus with two broad dark annuli or these indistinctly separated, each close to its end of the joint. Femur III black, with one pale annulus distad of middle and one less distinct at proximal end; tibia with a pale annulus at proximal end and a sub-median one; metatarsus pale at proximal end and at middle. Leg IV with femur having two pale annuli of which the more proximal is commonly incomplete below; the other joints as in leg III. The abdomen somewhat elongated, without any distinct humps above; dark, being covered with a dense network of black lines, a brown median longi-

tudinal black stripe above at base; venter blackish with a pale longitudinal line on each side. Posterior row of eyes rather strongly recurved, the median eyes much farther from each other than from the laterals. Area of median eyes longer than wide, a little narrower in front than behind.

Length, 3 mm. Length of cephalothorax, 1 mm. Length of tib. + pat. I, 1.54 mm.; of tib. + pat. IV, 1.13 mm.

Type—M. C. Z. 476. Utah: Fillmore.

DRASSIDÆ.

Drassodes robinsoni sp. nov.

Female—Carapace and sternum yellow of slightly reddish-brown cast. Legs yellow. Labium and endites brown, pale at tips. Abdomen yellowish grey, dusky on sides, especially posteriorly; a weakly indicated hestate outline from base to middle, with very faintly indicated chevron lines traceable behind it. Chelicerae deep brown. Lower margin of furrow of chelicera armed with two rather small teeth. Anterior row of eyes procurved; the eyes subequal or the medians a little the smaller; median eyes nearly their diameter apart, half as far from the laterals. Posterior row of eyes procurved; median eyes their larger radius apart, between once and a half their diameter apart from the laterals. Tibiæ I and II armed beneath with a single spine between middle and distal end. Posterior tibiæ armed with a spine above at base and with one distad of middle. Epigynum as shown in Plate XVI, Fig. 2.

Length, 9.6 mm. Length of cephalothorax, 3.9 mm. Length of tib + pat. I, 3.9 mm.; of tib. + pat. IV, 3.3 mm.

Type—M. C. Z. 418. Utah: Fillmore.

Dedicated to Mr. Joseph Robinson, of Fillmore, who gave enthusiastic assistance in the collecting of spiders in that region.

Drassodes gosiutus sp. nov.

Male—This species belongs in the *lpidosus* group. It is characterized among North American species in wholly lacking a tibial apophysis on the male palpus and in having the lower margin of the furrow of the chelicera bearing but a single, noduliform tooth. Carapace, sternum and legs yellow, the abdomen light grey or whitish. Anterior row of eyes procurved; median eyes larger than the laterals, about three-fourths, or somewhat more, their diameter apart and their radius from the laterals. Posterior row of eyes much longer than the anterior, obviously procurved; median eyes much larger than the laterals, subelliptic, somewhat angulate, only about their lesser radius apart, more than their long diameter from the laterals. Tibiæ I and II armed beneath distad of the middle with a single spine. Metatarsi I and II armed beneath its base with a single spine. The claw of the chelicera

long and somewhat sinuous. Upper margin of furrow of chelicera armed with three teeth of which the most proximal is nearer the median than is the most distal. Tarsus and bulb of male palpus proportionately small and slender; the tarsus bearing two long spines on its ventral face distad of the bulb. See Plate XVI, Fig. 3.

Length, 7.5 mm. Length of cephalothorax, 3.5 mm. Length of tib. + pat. I, 4 mm.; of tib. + pat. IV, 4 mm.

Type—M. C. Z. 389. Utah: Fillmore.

Drassodes melius sp. nov.

Female—Carapace and sternum pale testaceous, the legs more yellowish. Abdomen above dark brownish grey with a somewhat obscure, darker, median longitudinal stripe with vaguely indicated chevron marks behind, the venter somewhat lighter, much so in front of the epigastric furrow; the epigynum dark chestnut. Anterior row of eyes procurved; eyes subequal; median eyes nearly their diameter apart, a little less than their radius from the lateral. Posterior row of eyes straight; eyes smaller than the anterior ones and the medians slightly smaller than the laterals; median eyes a little less than once and a half their diameter apart and a little more than that distance from the laterals. Area of median eyes quadrate, as wide in front as behind. Lower margin of furrow of chelicera armed with two stout teeth. Tibiæ I and II each armed beneath with a single submedian spine. Posterior tibiæ not armed above at base. Epigynum as shown in Plate XVI, Fig. 5.

Male—Palpal organ as shown in Plate XVI, Fig. 4.

Length of female, 11 mm. Length of cephalothorax, 4.1 mm. Length of tib. pat. I, 4 mm.; of tib. pat. IV, 5 mm.

Length of male, 8.8 mm. Length of cephalothorax, 3.7 mm. Length of tib. + pat. I, 5 mm.; of tib. + pat. IV, also 5 mm.

Type—M. C. Z. 419. Utah: Uintah Mts., 10,000 ft.

Herpyllus oabus sp. nov.

Male—Carapace, legs and sternum yellow, without markings. Endites whitish across tips. Abdomen yellowish grey, darker above than beneath, without definite markings. Anterior row of eyes procurved; eyes about their diameter from edge of clypeus; median eyes larger than the laterals, scarcely their radius apart, closer to the laterals. Posterior row of eyes slightly procurved; eyes somewhat smaller than the anterior, the medians smaller than the laterals; median eyes nearly once and a half their diameter apart, closer to the laterals. Tibia I armed beneath with two pairs of spines, one pair basal and one submedian. Tibia II armed beneath with five spines, there being an unpaired spine at base, a pair at middle, and a pair of smaller ones at the distal end. Metatarsi I and II each armed beneath with two pairs of spines. Male palpus as shown in Plate XVI, Fig. 6.

Length, 4.6 mm. Length of cephalothorax, 2.4 mm. Length of tib. + pat. I, 2.4 mm.; of tib. + pat. IV, 2.8 mm.

Type—M. C. Z. 386. Utah: Fillmore.

***Zelotes tuobus* sp. nov.**

Female—Carapace black, in part of a dull chestnut cast. Sternum dense black. Legs black, of slightly brownish cast, excepting the tarsi, which are paler. Endites blackish, paler across distal end. Abdomen black or nearly so, a little paler, greyish black, beneath. Anterior row of eyes strongly procurved, the median eyes lying above the line connecting the centers of the laterals; laterals fully twice the diameter of the medians; the medians about their diameter apart, but very close to the laterals. Posterior row of eyes straight; median eyes a little smaller than the laterals, about three-fourths their diameter apart, a little farther from the laterals. Quadrangle of median eyes obviously longer than wide, slightly wider behind than in front. Tibiæ I and II unarmed beneath. Metatarsi I and II armed beneath at base with one pair of spines. Posterior tibiæ not armed above. Epigynum as shown in Plate XVI, Fig. 7.

Length, 9.5 mm. Length of cephalothorax, 3.9 mm. Length of tib. + pat. I, 3.6 mm.; of tib. + pat. IV, 4.2 mm.

Type—M. C. Z. 387. Utah: Fillmore.

This species is very close to *Z. ater* (Hentz). The epigynum is proportionately longer with the anterior pockets obviously closer together and the inner lateral elevated edges also less widely separated.

PHOLCIDÆ.***Psilochorus utahensis* sp. nov.**

Cephalothorax pale yellow. Legs darker yellow. Abdomen grey, with some darker mottling. Posterior row of eyes straight; median eyes nearly once and a half their diameter apart, contiguous with lateral eyes, about their radius from anterior laterals and three-fourths their diameter from anterior medians. Characterized by having femur I in the female shorter than femur IV, the reverse of the condition in the male. Process of chelicera in male large, arising at base and projecting prominently forward and downward, at tip acutely pointed and curving mesoventrad, (Plate XVII, Fig. 1). The species is characterized particularly by the details of structure of the male palpus. In this the femur is slender from base to a little beyond middle, with the distal end strongly enlarged; at base on ectal side an elongate tubercle or swelling and a small process or tubercle from ventral edge at distal end. The exterior process of the palpal organ straight, narrowest at middle, and differing from that of *pulullus* and *californiæ* in appearing bifid at distal end. (Plate XVII, Fig. 2).

Length of female, to 4.4 mm. Length of tib. + pat. I, 4.75 mm.; of tib. + pat. IV, 5 mm.

Type—M. C. Z. 451. Utah: Clear Lake; Fillmore; Fillmore Canyon; Pine Canyon; et cetera.

LINYPHIIDAE.

Linyphia latescens sp. nov.

Female—Dusky yellow, darker at margin, the eyes edged with black. Legs also yellow, the femora and patellæ dusky, the tibiæ with a broad annulus proximad of middle and a narrower, deeper one at distal end, the metatarsi also similarly annulate. Sternum blackish. Abdomen grey, with abdomen crossed, excepting at anterior end, by a series of heavy blackish chevron marks connected by a more obscure median longitudinal dark line; sides dusky. Posterior row of eyes straight, the median eyes a little less than their diameter from the laterals, nearer to each other. Anterior row of eyes a little procurved, the medians much smaller than the laterals, less than their diameter apart, obviously more than their diameter from the laterals. Area of median eyes as long as wide or very slightly longer.

Male—Coloration as in female. Palpus as shown in Plate XVII, Fig. 3. Embolus coiled in a circle at distal end.

Length of female, 2.2 mm. Length of cephalothorax, .9 mm. Length of tib. + pat. I, 1.36 mm.; of tib. + pat. IV, 1.25 mm.

Type—M. C. Z. 429. Utah: Uintah Mts.; Chalk Creek.

Linyphia orinoma sp. nov.

Female—Carapace, legs, chelicerae and endites yellow, without markings. Sternum and labium dusky or blackish, the color of the former appearing denser toward edges. Abdomen greyish yellow, with a few scattered small silvery dots and sometimes a dusky area at base of spinnerets on each side and occasionally also a dusky area in front of this; with no trace of dorsal dark markings, such as occur in *insignis*. Posterior row of eyes straight, the median eyes slightly nearer to each other than to the laterals, separated by their diameter or a little more. Anterior row of eyes straight; median eyes smaller than the laterals, their radius or less apart, nearly their diameter from the laterals. The epigynum projects in a straight, finger-like process, which is a little clavately expanded distad and is rounded at the end, where it has openings closer together than those of *insignis*; the dorsal surface just proximad of the tip having a deep lunate impression with concavity caudad, the form and position of this impression differing strongly from that of *insignis*. (Plate XVII, Fig. 4).

Length, 3.25 mm. Length of tib. + pat. I, 2.2 mm.

Type—M. C. Z. 427. Utah: Millard County; Clear Lake. Also a not fully matured specimen in Uintah Mts. on Chalk Creek.

Evidently close to *insignis* from which distinguished by the uniform presence of silver-colored spots on the abdomen, with absence of dorsal markings and particularly by the detailed structure of the epigynum.

***Bathypantes fillmoranus* sp. nov.**

Female—Carapace and sternum dusky yellow, the sternum the darker. Legs yellow. Abdomen above white, broken into closely arranged spots, a median dorsal line from which oblique lines on each side extend in an anastomosis. Venter greyish, with a few scattered small white dots. Posterior row of eyes straight; median eyes less than their radius apart, and about three-fourths their diameter from the laterals. Anterior row of eyes straight; medians smaller than laterals, less than their radius apart, more than their radius but less than their diameter from the laterals. Clypeus much narrower than length of area of median eyes. Upper margin of furrow of chelicera with six teeth, the lower margin with five much smaller ones. For epigynum see Plate XVII, Fig. 5.

Length, 2.2 mm. Length of cephalothorax, 1 mm. Length of tib. + pat. I, 1.25 mm.; of tib. + pat. IV, 1.13 mm.

Type—M. C. Z. 425. Utah: Fillmore Canyon.

***Grammonota orites* sp. nov.**

Male—Cerapace dusky yellow-grey, with the eyes edged with black. Sternum and labium dusky over yellowish to nearly solid black. Legs, endites and chelicerae yellow. Abdomen dusky over a paler background to nearly solid black; dorsum without definite markings. Posterior row of eyes slightly procurved, eyes equidistant, separated by nearly their diameter. Anterior row of eyes straight; median eyes much smaller than the laterals, hardly their diameter from the latter, nearer to each other. Clypeus a little wider than the eye area. Pars cephalica rising behind eye area as usual; crossed by a single median longitudinal series of setae, which are longest just caudad of the eyes. Upper margin of furrow of chelicera with four or five large teeth, the lower margin with several much smaller ones. Tibial apophysis of palpus large, plate-like, with mesal side produced forward as a one-pointed process which curves ectad at tip. See Plate XVII, Fig. 8.

Female—The epigynum is shown in Plate XVII, Fig. 7.

Length, 2.3 mm.

Type—M. C. Z. 440. Utah: Uintah Mts.; Chalk Creek, 7,500 ft.

Distinguished from other North American species by the form of the tibial process of the male palpus and the structure of the palpal organ.

Grammonota simplex sp. nov.

Male—A smaller and paler species than the preceding one from which it is at once distinguishable in lacking the conspicuous tibial apophysis of the palpus. Carapace dusky yellow with the darker shield-shaped area at posterior end of pars cephalica; the sternum darker. Legs yellow. Abdomen blackish to grey. Posterior row of eyes straight, the eyes equidistant. Anterior row of eyes straight, eyes close together, sometimes appearing nearly equidistant, but most commonly with the medians nearer to each other than to the laterals; the medians smaller than the laterals. Tibia of palpus wholly lacking an apophysis at distal end above. See Plate XVIII, Fig. 1.

Female—Epigynum as shown in Plate XVIII, Fig. 2.

Length of male, 2 mm. Length of cephalothorax, .9 mm. Length of tib. + pat. I, .8 mm.

Type—M. C. Z. 432. Utah: Uintah Mts.; Chalk Creek, 7,300 ft.

Grammonota obesior sp. nov.

Female—Carapace comparatively low, yellowish of slightly orange cast with a black marginal line on each side; eyes edged with black. Sternum dusky. Abdomen blackish, under the lens showing numerous minute light dots and some light lines at sides of dorsum. Eyes as in the preceding species. Abdomen proportionately broader and higher than in the preceding forms. Distinguishable by the characteristic form of the epigynum which is represented in Plate XVII, Fig. 6.

Length, .2 mm. Length of cephalothorax, .8 mm.; width, .66 mm. Length of tib. + pat. I, .8 mm.; of tib. + pat. IV, .9 mm.

Type—M. C. Z. 437. Utah: Uintah Mts.; Chalk Creek.

Grammonota fratrella sp. nov.

Female—A smaller species readily distinguishable by the form of the epigynum. The carapace is slightly dusky over a dilute yellowish background, the eyes and lateral borders narrowly edged with black. Sternum very dusky, nearly black. Legs pale yellow. Abdomen black or nearly so, without definite markings. Posterior row of eyes straight; median eyes their diameter apart, slightly nearer to the lateral. Anterior row of eyes a little recurved; median eyes much smaller than the laterals, scarcely their radius apart, their diameter from the laterals. Clypeus narrower than eye area. Epigynum as shown in Plate XVIII, Fig. 3.

Length, 1.64 mm. Length of cephalothorax, .76 mm. Length of tib. + pat. IV., .9 mm.

Type—M. C. Z. 443. Utah: Uintah Mts., 8,500 ft.

***Cornicularia monticolens* sp. nov.**

Female—Carapace dusky yellow to dusky chestnut, the lateral margins solid black; eyes edged with black. Sternum more blackish than carapace. Labium and endites also dusky. Legs yellow, often dusky, with distal ends of coxæ beneath often narrowly lined with black. Abdomen blackish, without definite markings. Posterior row of eyes straight or slightly recurved, the median eyes farther from each other than from the laterals. Nearly twice their diameter apart. Anterior row of eyes straight; median eyes much smaller than laterals, nearer together, but well separated from the laterals. Area of median eyes slightly wider than long. Clypeus moderately oblique, impressed transversely below eyes, slightly higher than length of median eye area. Epigynum as shown in Plate V, Fig. 4.

Male—Anterior end of pars cephalica conspicuously elevated, rounded, highest just back of anterior median eyes, bulging forward a little over clypeus which is incurved above its lower edge. A long auditory hair at distal end of tibia IV. In the palpus the tibial apophysis is much more slender than in e. g. *Cornicularis spiralis*, the genotype, and is slenderly uncate at tip. The embolus is strongly coiled in a flat spiral, which is not in part covered as it is in *spiralis*, etc. See further, Plate XVIII, Fig. 5.

Length of female, 1.7 mm. Length of cephalothorax, .77 mm. Length of tib. + pat. I, .63 mm.; tib. + pat. IV, .7 mm.

Type—M. C. Z. 444. Utah: Uintah Mts.; Chalk Creek.

This species in a group with the eastern *C. spiralis* Em. and *C. vigilax* B., of Europe. It is strongly different from those species in the form of the tibial apophysis of the male and in the details of the eye relations, etc.

***Diplocephalus wamotsus* sp. nov.**

Female—Carapace dusky yellow to dusky brown with the frontal gibbosity paler, often whitish, the sternum somewhat darker than carapace. Legs yellow. Abdomen grey. Posterior row of eyes more procurved than typical, but the tangent to anterior edges of its median eyes intersecting the posterior portion of the laterals; median eyes nearly their radius apart, not quite twice as far from the laterals. Anterior row of eyes slightly procurved; the medians much smaller than the laterals, sub-contiguous with each other, but widely separated from the laterals. Clypeus about as wide as length of median ocular area. Area of median eyes much longer than wide. Upper margin of furrow of chelicera armed with three well separated, long teeth; the margin with a close-set series of several very small teeth. Epigynum as shown in Plate XVIII, Fig. 7.

Male—Post-ocular gibbosity broad, with each antero-lateral corner extended as a rounded protuberance, its median region and a narrower inter-ocular region in front of it rather densely pilose; posterior median eyes borne at base of its anterior face. Posterior row of eyes very strongly procurved; the medians separated by nearly their diameter,

three times as far from the laterals. The clypeus obviously more protuberant than in female, as usual. Tibia of palpus with anterior end extended into a thin, cup-like plate embracing the base of the tarsus like a calyx and bearing a slender chitinous process from below its distal end. See Plate XVIII, Fig. 6.

Length of male, 2.8 mm. Length of cephalothorax, 1.2 mm.; width, .9 mm. Length of tib. + pat. I, 1 mm.; of tib. + pat. IV, 1.36 mm.

Type—M. C. Z. 446. Utah: Chalk Creek.

Wubana gen. nov.

Posterior row of eyes a little procurved; the median eyes farther from each other than from the laterals. Anterior row of eyes slightly procurved; eyes close together, the medians from a decidedly smaller to nearly as large as the laterals; eyes equidistant or with the medians nearer to each other than to the laterals. Area of median eyes trapeziform, much wider behind than in front, from a little longer than wide to wider than long (some males). Clypeus as high as eye area. Thoracic stria obscure. Pars cephalica in male rising behind the eye area; piligerous in a median longitudinal stripe, with a brush of longer setæ just behind the eyes which may or may not be elevated on a distinct process, one hair of this brush typically stouter, more spiniform than the others. Sternum broad, extending between posterior coxæ. Male palpus with patella not enlarged; tibia prolonged in an elongate lobe of ordinary texture along basal part of ectal side of the tarsus. Legs long and slender, anterior tarsi shorter than metatarsi, and metatarsi shorter than tibiæ.

Genotype—*W. drassoides* (Emerton).

In addition to the genotype, originally described under *Bolyphantes* and also later referred to *Sphecozone*, the new form described below and apparently also *Bolyphantes pacificus* Banks, later referred to *Nematogmus*, belong in this genus. The genus differs from *Nematogmus* in having the posterior median eyes farther from each other than from the laterals with the row at most but gently procurved, in its longer legs, in lacking postocular impressions in the male, in the form of the tibia of the male palpus and in not having the tarsus of the latter deeply bifid at the apex. From *Sphecozone* the genus differs, e. g., in having the median eyes of the posterior row farther from each other than from the laterals, in not having them borne upon the frontal lobe sometimes present in the male, in lacking the notably long pedicle to the abdomen, and in the form of the male palpus. I have taken the genotype, *W. drassoides*, originally described from Mt. Carmel, in Connecticut and until now not since recorded from elsewhere, also in the Uintah Mts., of Utah, at an elevation of 7,500 ft.

Wubana retrahens sp. nov.

Male—Cephalothorax and legs dull fulvous. Eyes edged with black. Abdomen greyish; marked above as in *W. drassoides* with a median longitudinal black line at base followed behind by several transverse dark lines; sides and part of venter dusky. Eyes of anterior row equidistant, the medians a little smaller than the laterals. Posterior row of eyes gently procurved; medians scarcely their diameter apart, nearer to the laterals. Area of median eyes longer than wide. Piligerous stripe extending from caudal end of pars cephalica forward between eyes, with no special process of elevation behind eyes beneath the brush of longer hairs. Palpus as shown in Plate XVIII, Fig. 10.

Length near 2 mm.

Type—M. C. Z. 447. Utah: Fillmore.

The male is at once distinguishable from those of *W. drassoides* and *W. pacifica* in lacking the postocular piligerous eminence. It is notably different from *W. drassoides* in having the posterior median eyes much closer together, with the area of median eyes longer than wide instead of wider than long. The structure of the male palpal organ is also a feature readily distinguishing the species.

Hilaira uta sp. nov.

Female—Carapace, sternum and endites dusky over a light brown ground, less often yellowish, the labium and chelicerae darker. Legs dusky light brown to yellow. Abdomen grey, more or less dusky, with no markings. Posterior row of eyes straight; median eyes their diameter apart, once and a half as far from the laterals. Anterior row of eyes substraight, being very slightly recurved; medians smaller than the laterals, less than their radius apart, their diameter from the laterals. Area of median eyes subequal in length and breadth or slightly longer (11:10), narrower in front than behind in about ratio 9:10. Clypeus in height equal to length of median eye area. Epigynum as shown in Plate XVIII, Fig. 9.

Male—The palpal organ is distinctive. The spinulose submedian lobe, or apophysis, of the bulb is a notable feature. See Plate XVIII, Fig. 8.

Length of female, 3.8 mm. Length of cephalothorax, 1.8 mm.; width, 1.3 mm. Length of tibia + patella I, 1.4 mm.; of tibia + patella IV, 1.7 mm. Length of male, 2.8 mm.; of cephalothorax, 1.4 mm.

Type—M. C. Z. 448. Utah: Millard Co.; Clear Lake.

This species is readily recognizable by the form of the epigynum in the female and of the palpal organ in the male.

ARGIOPIDÆ.

Aranea (Neoscona) utahana sp. nov.

Female—This species belongs with *vertebrata* McCook in the group with longitudinal thoracic groove and having the anterior femora armed beneath with a double series of numerous stout spines. It differs from other forms of this group conspicuously in the form of the abdomen, which is rather broadly triangular-oval instead of elongate oval. The carapace grey of slightly yellowish cast marked with a conspicuous median longitudinal black band with lower border of pars cephalica also black followed on pars thoracica by one or more obscure dark spots. Sternum yellowish grey in the middle borders black. Abdomen grey with a folium on the posterior half limited on each side by a wavy black line edged with a pale line; just within the limiting line of folium on each side is a straight dusky line, while on the median region are two longitudinal dark lines close together; on each side of folium are numerous dark lines running from its edge ventrad; each anterolateral corner dark, the dark area crossed by fine vertical pale lines; midventral region black, the stripe embracing at each border two white spots, of which the anterior is the larger. Legs light yellow, deeply banded with black. The femur of anterior legs with a black submedian annulus and a broader distal one; the patella black, obscurely divided by a pale median area; the tibia with a black annulus at each end and one at the middle; and the metatarsus similarly triannulate. The tibiæ of legs III and IV lack the median black annulus as does metatarsus III, while it is present on metatarsus IV. Hairs of body in general whitish. The scape of the epigynum is in general similar to that of *vertebrata*, but is evenly curved, not at all geniculate. See Plate XIX, Figs. 1 and 2.

Length, 12 mm. Length of abdomen, 8.5 mm.; width across base, 8.2 mm. Length of cephalothorax, 5.2 mm. Length of tib. + pat. I, 7 mm.; of tib. + pat. IV, 6 mm.

Type—M. C. Z. 458. Utah: Fillmore. Webs found in sagebrush on desert flats west of the town. The color of the spiders blends with the olive grey of the sage-brush.

Aranea tusigia sp. nov.

Male—Carapace light brown above, the lower part of sides blackish brown with upper border of stripe serrate, a narrow marginal light stripe below dark area on each side. Sternum black. Legs yellow, marked with dark annuli; on femora a narrow annulus at base, a second broader one distad of middle and a third one toward distal end, the extreme distal end being of a reddish yellow cast. Tibiæ black at proximal end, at least above, and in a much broader annulus at distal end; metatarsi also dark at both ends, more narrowly so at the proximal one; tarsi darkened distally. Abdomen with folium above limited by a sinuous

light line on each side, the folium back of middle solid black and at its anterior end embracing a short median longitudinal stripe, which widens caudad; venter with a broad black stripe behind epigynum in each lateral edge of which is a yellowish spot; sides marked by fine longitudinal black lines or streaks. Thoracic furrow long, longitudinal, with no transverse impressions. The first coxa has a stout hook at distal end, while the second coxa is armed at base with a longer, stout, conical and nearly straight process. The tibia of leg II is enlarged with its mesal (anterior) surface convex; it is armed beneath with a double series of long stout spines, the posterior series in the type consisting of six spines and the anterior of three; the mesal or anterior surface in addition is armed with numerous spines in two or partially in three series, most of these spines being distad of the middle and these being much shorter and stouter than the others, about seventeen spines in all on the anterior surface. Palpus of male of characteristic form. See Plate XIX, Fig. 3.

Length, 8 mm. Length of cephalothorax, 4.2 mm. Length of tib. + pat. I, 5 mm.; of tib. + pat. IV, 4.2 mm.

Type—M. C. Z. 461. Utah: Chalk Creek.

CLUBIONIDÆ.

Clubiona orinoma sp. nov.

Female—Carapace dull yellow of slightly brownish cast. Sternum and legs light yellow. Labium and endites brown. Chelicerae light chestnut. Abdomen beneath light yellowish grey; dorsum reddish brown over a yellow ground with a narrow median longitudinal reddish line from base to behind middle, this pointed at caudal end; sometimes fine pale chevron lines traceable on posterior region. Lower margin of furrow of chelicera armed with two moderately stout teeth with sometimes distad of these a number of granular elevations. Anterior row of eyes straight; eyes less than their radius from lower margin of clypeus, equidistant, nearly their diameter apart. Posterior row of eyes much longer than the anterior with eyes smaller; row straight; median eyes two and a half times their diameter apart, twice their diameter from the laterals. Area of median eyes much wider than long, wider behind than in front in about the ratio 22:15. Tibia I and II armed beneath with two pairs of spines, the corresponding metatarsi each with a single basal pair. Epigynum as shown in Plate XIX, Fig. 4.

Length, 6.5 mm. Length of cephalothorax, 2.6 mm. Length of tib. + pat. I, 2.2 mm.; of tib. + pat. IV, 2.2 mm.

Type—M. C. Z. 474. Utah: Chalk Creek.

AGELENIDÆ.

Agelena mimoides sp. nov.

Male—Carapace with the usual broad median longitudinal dorsal yellow stripe and yellow lateral stripes; a marginal dark line on each side; the lateral dark bands rather narrow, with lower edge uneven; eyes edged with black. Legs yellow, in type, with some vague darker markings on femora, but with not distinct annuli. Sternum yellow, a little deeper at the edges. Labium and endites darker, pale at tips. Chelicerae light chestnut. Abdomen beneath immaculate light greyish yellow in middle region, an interrupted longitudinal dark line or series of dark spots toward each side; dorsally a broad longitudinal yellow stripe bordered with dark, the mesal edge of which is uneven or serrate and enclosing a vague saggittate outline in basal half. Lower margin of furrow of chelicera armed with two teeth as in *californica* and *pacifica*. Anterior median eyes smaller than the laterals, less than their radius apart and from the laterals. Posterior median eyes three-fourths or scarcely more their diameter apart, their diameter from the laterals. Tibia I armed beneath with three pairs of spines; tibia II with a single spine at base and a submedian and apical pair. The palpus of the male parallels in general structure that of *A. pacifica*. The most readily noted differences are in the tibia and its processes. In the dorsal view the excavation is seen to be more extensive, extending slightly farther mesad; the limiting posterior ridge presents a distinct process above which is always lacking in *pacifica* and in lateral view is seen to continue evenly out along the lateral apophysis, instead of showing an abrupt interruption. Other differences are noticeable in the details of the palpal organ. See Plate XIX, Figs. 5 and 6.

Female—The epigynum of the female is distinguished in having the posterior region more widely elevated with the lateral spurs weaker and more widely separated.

Type—M. C. Z. 464. Utah: Fillmore Canyon.

Cicurina garrina sp. nov.

Female—Carapace, sternum, and legs pale brown, the legs darker distally, the posterior pair somewhat chestnut. Labium, endites and chelicerae chestnut. Abdomen immaculate grey. Eyes of anterior row equidistant, the medians about five-sevenths the diameter of the laterals. Posterior median eyes equal size to the anterior medians, the posterior laterals scarcely smaller than the anterior laterals. Posterior median eyes once and a half their diameter apart, their diameter from the lateral on each side. Chelicerae strongly geniculate; lower margin typically with three stout teeth followed by three much smaller ones. Tibia I armed beneath with three pairs of spines, the anterior side with three single spines of which the most proximal one is subventral. Metatarsus I with three pairs of spines, the anterior face with two spines. Tibia II armed beneath with 1-1-2 spines. Epigynum, Plate XIX, Fig. 9.

Male—The palpus very similar to that of *C. arcuata*, but differing in details.

Length of female, 9 mm. Length of cephalothorax, 3.2 mm. Length of tib. + pat. I, 3 mm.; of tib. + pat. IV, 3.1 mm.

Type—M. C. Z. 470. Utah: Chalk Creek, elevation 8,000 ft.

A species much resembling the Louisianan *C. ludvoiciana* Simon in coloration, proportions and general structure. It may be distinguished in having the posterior median eyes much farther apart than from the laterals, instead of these eyes being equidistant, in having three spines on the anterior face of tibia I instead of but two; metatarsus I with two spines on anterior side, instead of but one, etc.

***Cicurina utahana* sp. nov.**

Female—A small form with carapace and sternum yellow, the legs more brownish especially distad. Carapace glabrous or nearly so. Abdomen grey, immaculate, the epigynum light chestnut. Lower margin of furrow of chelicera armed with four teeth, a minute fifth one detectable on one side in the type. Posterior row of eyes straight; median eyes smaller than the laterals, nearly their diameter from the latter, slightly farther from each other; posterior medians obviously smaller than in *arcuata* and the spacing of the posterior eyes more nearly equidistant. Epigynum, Plate XIX, Fig. 8.

Length, 5.2 mm. Length of cephalothorax, 2+mm. Length of tib. + pat. I, 1.8 mm.

Type—M. C. Z. 467. Utah: Millard Co.; Pine Canyon.

***Cicurina utahana anderis* subsp. nov.**

Female—This form very much resembles in size and coloration the typical *C. utahana*. The epigynum is also very similar, but is proportionately smaller with the intermediate loop of the seminal duct on each side rising only a little farther forward than the ectal loop. The types differ from *utahana* in the spining of the anterior legs. Tibia I is armed beneath with three pairs of spines instead of two pairs, with two spines on the anterior face. Tibia II bears beneath three spines in line toward the caudal side with a fourth one paired with the most distal of these at distal end while on the anterior face is but a single spine; in *utahana*, on the other hand, there are but two spines beneath toward the caudal side with one distal spine not in line with these, while there are two spines on the anterior face.

Length, 6 mm. Length of cephalothorax, 2.1 mm. Length of tib. + pat. I, 1.8 mm.; of tib. + pat. IV, 2 mm.

Type—M. C. Z. 469. New Mexico: San Geronimo.

Cicurina idahoana sp. nov.

Female—Carapace and legs yellowish brown. Abdomen cinerous, without markings. Posterior row of eyes straight; eyes large, the medians smaller than the laterals; median eyes separated from the laterals by about their diameter, farther from each other. Anterior row of eyes procurved; medians smaller than the laterals, their radius or less apart, nearer to the laterals. Area of median eyes wider behind than in front; wider than long. Tibia I armed beneath with three pairs of spines and on the anterior face with three single spines of which two more proximal ones are much nearer to each other as usual. Metatarsus I armed beneath with three pairs of spines and with one spine on anterior face proximad of middle. Tibia II and Metatarsus II also armed beneath each with three pairs of spines. The species is readily recognizable by the structure of the epigynum (Plate XIX, Fig. 10).

Length, 7 mm. Length of cephalothorax, 3.1 mm. Length of tib. + pat. I, 3 mm.; of tib. + pat. IV, 3.2 mm.

Type—M. C. Z. 466. Idaho: Moscow Mts., J. A. Hyslop, coll., 1910.

LYCOSIDÆ.

Pardosa utahensis sp. nov.

Female—A small form apparently closely related to *P. emertoni* Chamb. It is a much darker species, though with the dorsal markings corresponding. Carapace with integument brown, with a straight black stripe along each side, a black marginal line and above it a heavier black supramarginal line; eye region black; the light stripes clothed densely with bright white hair, which is a little rufous about eyes. Sternum black, excepting a pale median region, instead of pale yellow with simply small marginal black dots. Legs dusky brown. Abdomen with dorsum black along each side, leaving a pale, caudally narrowing stripe over entire length, this enclosing anteriorly a dark hastate mark; venter dark grey; epigynum dark chestnut; light areas clothed in life with bright white hair. Anterior row of eyes much shorter than the second, about equalling the distance from center to center of the eyes of the latter; a little procurved; median eyes obviously more widely separated than in *emertoni*, clearly more than their diameter apart and less than their diameter from the laterals. Eyes of second row once and a half their diameter apart. Anterior tibiæ and metatarsi armed beneath as usual, the first two pairs of spines being very long and slender with the first widely overlapping the second. Epigynum as shown in Plate XIX, Fig. 11.

Length, 6.5 mm. Length of cephalothorax, 2.9 mm. Length of tib. + pat. I, 3 mm.; of tib. + pat. IV, 3.6 mm.

Type—M. C. Z. 385. Utah: Chalk Creek, elevation 8,000 ft., August, 1917.

EXPLANATION OF PLATES.

PLATE XIV.

- Fig. 1. Epigynum of *Amaurobius nomeus* sp. nov.
- Fig. 2. Male palpus, dorsal view, of the same.
- Fig. 3. Right chelicera, ectal view, of *Dictyna uintana* sp. nov.
- Fig. 4. Epigynum of the same.
- Fig. 5. Right male palpus, ectal view, of the same.
- Fig. 6. Left chelicera, of male, ectal view, of *Dictyna coloradensis* sp. nov.
- Fig. 7. Epigynum of the same.
- Fig. 8. Right male palpus, ectal view, of the same.

PLATE XV.

- Fig. 1. Epigynum of *Dictyna vincens* sp. nov.
- Fig. 2. Right male palpus, ectal view, of the same.
- Fig. 3. Right chelicera, ectal view, of *Dictyna bellans* sp. nov.
- Fig. 4. Epigynum of the same.
- Fig. 5. Right male palpus, ectal view, of the same.
- Fig. 6. Right male palpus, ectal view, of *Dictyna insolens* sp. nov.
- Fig. 7. Right male palpus, ectal view, of *Dictyna olympiana* sp. nov.
- Fig. 8. Epigynum of *Dictyna sociella* sp. nov.

PLATE XVI.

- Fig. 1. Epigynum of *Dictynoides arizonensis* sp. nov.
- Fig. 2. Epigynum of *Drassodes robinsoni* sp. nov.
- Fig. 3. Left male palpus, ectal view, of *Drassodes gosiutus* sp. nov. (All hairs and spines omitted as usual, excepting ventral distal spines of tarsus.)
- Fig. 4. Left male palpus, ectal view, of *Drassodes melius* sp. nov.
- Fig. 5. Epigynum of the same.
- Fig. 6. Left male palpus, ectal view, of *Heryullus oabus* sp. nov.
- Fig. 7. Epigynum of *Zelotes tuobus* sp. nov.

PLATE XVII.

- Fig. 1. Right male chelicera, ectal view, of *Psilochorus utahensis* sp. nov.
- Fig. 2. Right male palpus, ectal view, of the same.
- Fig. 3. Left male palpus, ectal view, of *Linyphia latescens* sp. nov.
- Fig. 4. Epigynum of *Linyphia orinoma* sp. nov.
- Fig. 5. Epigynum of *Bathyphantes fillmorana* sp. nov.
- Fig. 6. Epigynum of *Grammonota obesior* sp. nov.
- Fig. 7. Epigynum of *Grammonota orites* sp. nov.
- Fig. 8. Right male palpus, ectal view, of the same.
- Fig. 9. Right male palpus, dorsal view, of the same.

PLATE XVIII.

- Fig. 1. Left male palpus, ectal view, of *Grammonota simplex* sp. nov.
- Fig. 2. Epigynum of the same.
- Fig. 3. Epigynum of *Grammonota fratrella* sp. nov.
- Fig. 4. Epigynum of *Cornicularia monticolens* sp. nov.

- Fig. 5. Left male palpus, ectal view, of the same.
Fig. 6. Left male palpus, ectal view, of *Diplocephalus wamotsus* sp. nov.
Fig. 7. Epigynum of the same.
Fig. 8. Left male palpus, ectal view, of *Hilaira uta* sp. nov.
Fig. 9. Epigynum of the same.
Fig. 10. Right male palpus, dorsal view, of *Wubana retrahens* sp. nov.

PLATE XIX.

- Fig. 1. Epigynum, ventral view, of *Aranea utahana* sp. nov.
Fig. 2. Epigynum, lateral view, of the same.
Fig. 3. Left male palpus, ectal view, of *Aranea tusigia* sp. nov.
Fig. 4. Epigynum of *Clubiona orinoma* sp. nov.
Fig. 5. Right male palpus, ectal view, of *Agelena mimoides* sp. nov.
Fig. 6. Tarsus of right male palpus, dorsal view, of the same.
Fig. 7. Epigynum of *Agelena naevia* Hentz, variety (Uintah Mts.)
Fig. 8. Epigynum of *Cicurina utahana* sp. nov.
Fig. 9. Epigynum of *Cicurina garrina* sp. nov.
Fig. 10. Epigynum of *Cicurina idahoana* sp. nov.
Fig. 11. Epigynum of *Pardosa utahensis* sp. nov.